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Effectiveness of an Agricultural Conservation Program
which offers Assistance in Conservation to all Farmers

Roy J. Jordre
Conservation Programs Branch, OP
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At a time when every effort is being expended to obtain the greatest possible production of food and fiber and thus risking the additional danger of soil erosion, it is well to examine the effectiveness of methods by which farmers are encouraged to carry out conservation practices that will conserve the agricultural resources of the country.

The crop, range, pasture and forest land represent a large portion of the nation's basic resources. In the tremendous drive for increased production of food and fiber it is important that this increase be obtained with the least permanent damage to these resources. Citizens living in our cities and towns should be interested in maintaining our agricultural plant in a condition which will enable it to produce efficiently in future years so that maximum production of food at reasonable prices will be assured.

Public Conservation Programs

Agricultural Experiment Stations have taken the lead in research to determine the conservation and land management practices needed in each State. Research is needed to determine the relative advantage of various soil types for particular purposes and the relative advantage of different practices on the same soil type. The major purpose of research in agriculture is to discover means and principles to aid farmers in meeting their problems. Farmers as individuals cannot conduct the research work needed in agriculture, it is a public function.

The Extension Service for many years working through leading farmers encouraged them to carry out conservation practices on their farms. This service was established with public funds to provide a means of showing farmers how research information could be used by them. Arrangements are made with farmers in different sections of the county to demonstrate improved methods on their farms.

The Soil Conservation Service has conducted demonstration projects with the aid of funds and labor from the Civilian Conservation Corp, relief rolls, or by regular government employment. At the present time the SCS is giving engineering services, furnishing equipment and materials and is furnishing farm mapping and farm planning services to farmers through local soil conservation district organizations. These districts operate under legal authority of the States to assist farmers in carrying out erosion control operations and with power to enforce land use regulations needed for erosion control. As of June 30, 1943 farm plans had been prepared for 170,911 farms and ranches in soil conservation districts in 42 States and 92,995 plans had been prepared on demonstration projects.

Beginning in 1936 the Agricultural Adjustment Administration developed a national agricultural conservation program designed to assist every one of the more than 6,000,000 farmers in the United States in carrying out conservation practices. Since that time about three-fourths of these farmers have received

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payments, materials or services from the government through the Agricultural Adjustment Administration for performing soil and water conservation practices on their farms. Thus soil conservation was made a vital part of agricultural adjustment. The assistance is designed to cover only a part of the costs required to carry out needed conservation practices. This offer of assistance from AAA for performing specific soil conservation practices made many farmers realize for the first time the importance of soil conservation. The conservation practices for which assistance is given in the present program of the AAA are those which maintain or increase soil fertility, control or prevent soil erosion caused by wind or water, encourage conservation and better agricultural use of water, conserve and increase range and pasture forage and increase production of agricultural commodities required for the war. The conservation practices for which assistance is given in each State are those recommended by the State AAA committee after conferring with the State Agricultural Experiment Station, the Extension Service, SCS and other Agricultural Agencies. The large volume of typical conservation practices that has been carried out by farmers since the AAA conservation program began in 1936 is illustrated in the following table:

<u>Practices</u>	<u>Unit</u>	<u>1936</u>	<u>1942</u>	<u>1942 as % of 1936</u>
Application of limestone	tons	3,620,000	18,971,484	524
Application of 20% super-phosphate to soil conserving crops	tons	121,000	1,073,304	887
Green manure & cover crops	acres	13,687,327	17,342,697	127
Contour listing pasture or range land	acres	1,293,000	8,000,000	619
Protected summerfallow	acres	3,584,000	14,105,000 ^{1/}	394
Strip cropping	acres	989,000 ^{2/}	8,404,000	850
Range land reseeded by deferred grazing	acres	36,847	19,378,000	52,590
Artificial reseeding pasture & range	lbs. seed	195,000 ^{2/}	9,923,000	5,089
Construction of dams and reservoirs for stock waters	cu. yds.	5,230,000	43,865,000	839
Seedings of grasses and legumes	acres	30,297,031	38,311,557	126
Planting trees	acres	35,581	60,714	171

^{1/} Does not include summerfallow protected by strip cropping

^{2/} 1937 figure

Society's Interest in Conservation

Conservation practices benefit society and promote general welfare, since they conserve our irreplaceable and basic national resource, the soil. Many of the practices when carried out result in the farmer obtaining increased income through increased yields, more efficient production or through maintaining yields which would otherwise decline. Conservation farming which promotes more efficient production tends to lower food cost to the consumer. To the extent that conservation farming increases production and prevents destruction of the soil, it assures supplies of food and fiber for the national security. Families living on soils which are permitted to deteriorate are unable to maintain even a low level of living and will become a public liability. The carrying out of additional conservation practices offers one of the best methods of obtaining increased production without additional labor and equipment. This is very important during the present war period.

The results from conservation practices usually follow a year or more after practices are established or carried out. This is a reason why many farmers hesitate to carry out conservation practices even though they realize that conservation farming might be more profitable. The benefits or practices which do not give results until after a period of years may accrue more to succeeding operators and to society than they do to the individual who carried out the practices.

Even though a farmer may realize that his present farming operations are damaging the soil and that a change might make it possible not only to conserve his soil but eventually to increase his income he may continue his present system because the immediate benefits seem insignificant compared to the effort involved. Farming methods that have been followed by several generations of farmers are often reluctantly discontinued for new and improved methods. This inertia must be overcome if adequate conservation is to be accomplished. Habit is a strong factor in maintaining systems of farming that have permitted reduced productivity and encouraged soil erosion. These methods have continued because they were developed first and the institutional patterns associated with them act as deterrents to change. This is illustrated by types of rental systems which were used under the one crop system of farming, being carried over even after a considerable amount of diversification had occurred in the area.

Many farmers are not aware of the seriousness of erosion which is occurring on their farms. Sheet erosion has been particularly destructive and many do not realize that erosion is taking place until gullies develop which interfere with farming operations. Heavy losses of organic matter have taken place from our cultivated soils. Many farmers who recognize that their farms are becoming less productive do not know what steps to take to reduce erosion losses. Few farmers have all of the necessary facts in order to decide whether conservation farming would be more profitable than the present system.

Tenants and share croppers because of their turn-over in tenure, or lack of credit or finances at the time of initiation of a practice often do not evidence interest in carrying out conservation practices. Most of the practices require expenditure of funds or other resources at the time they are carried out.

Farmers frequently have total crop losses by uncontrollable hazards in spite of use of the best practices. This causes many farmers to hesitate to invest in conservation practices when they are not sure that they will be on the land to realize the benefits from such practices. The offer of assistance through the Agriculture Adjustment Agency Conservation Program assures farmers that a part of the original cost or investments will be reimbursed. As a general rule farm income is lowest on farms where conservation practices are needed most. Even though total farm income is now higher than in recent years a very large group of farmers do not have sufficient income in the form of ready cash when needed to finance a sufficient number of conservation practices.

On many farms the operators are older men who are not particularly interested in conservation, especially in cases where the benefits are not fully achieved for several years. They will continue to follow exploitive systems of farming which give greater profit during the few years which they expect to continue farming. Public assistance is needed to assure that conservation will be carried out on these farms to prevent serious erosion which might take place before a new and younger operator will take charge of the farm.

Erosion problems which can be prevented or solved now with moderate cost, if allowed to go unchecked will become more difficult to control and will result in decreased yields in the near future. In areas of moderate erosion the cost of necessary control measures at present are low as compared to the cost that will be necessary to assure continued use of the land if conservation work is delayed.

Elements of a Successful Program

A successful conservation program is one which encourages the greatest volume of needed conservation practices to be carried out by the greatest number of farmers and ranchers. The offer of public assistance to individual farmers through conservation payments provides an excellent means whereby conservation work needed on individual farms in order to prevent losses to our national land resources can be carried out in large volume within a reasonable length of time.

This offer to individual farmers directs and uses individual farmers initiative, labor, power and other resources in carrying out those practices which will help to solve many of the conservation problems in a program which is national in scope. The AAA technique of direct payments of public funds to individual farmers has influenced more farmers to introduce conservation farming on the land than any other system yet devised.

The program of payments to farmers for increased conservation is an assurance to society that it will get greater results from the funds it has provided and is now providing for agricultural education, agricultural research and for conducting conservation demonstrations. The enormous increase in volume of conservation practices that has been accomplished since the AAA Conservation Program began in 1936 is evidence of the effectiveness of a program which offers assistance to individual farmers.

Another important advantage of the offer of payments to individual farmers who perform conservation work is that the funds are not spent until the conservation work is actually carried out on the land. The individual farmer must perform a particular practice before the public assistance is expended. The public therefore has assurance that the funds are not expended without conservation work being performed on the land.

Most practices needed on farms can be carried out by the individual farmer using his own initiative and resources or by his arranging to have work done by others who specialize in certain types of construction work. The individual who goes over his fields and pastures several times every year is more familiar with conditions on his farm than anyone else. Each farmer must plan the operations on his own farm. However the few practices which require the services of engineers and the use of large construction equipment which farmers do not have can either be hired by them or furnished through local or national government agencies. The conservation job will not be adequately performed until each farmer is carrying out the major responsibility for conservation practices needed to prevent unnecessary erosion on his land.

The total job is too large to be performed by the engineering services and equipment of government agencies. The large financial outlay necessary for the Federal Government to perform the conservation work directly and the impossibility of doing the job in a reasonable length of time shows that the major emphasis on conservation should be to encourage individual farmers to apply their resources to conserving the land.

Large demonstration projects as a method of solving conservation problems have certain limitations. One of the most serious of these is the large financial outlay necessary to establish and complete a full demonstration in one locality while other parts of a State are receiving little or no assistance. It is costly and slow. The best demonstration of conservation is an individual farmer in each community successfully carrying out a conservation and proper land use program on his farm.

The maximum efforts of all the educational agencies, all engineering services of government agencies, along with the private effort stimulated through the incentive created by financial and other assistance to individual farmers will be required to get maximum benefits from conservation. Research, education, demonstrations, and special technical services will all need to be developed and used to the fullest extent with the farmer performing most of the work with the minimum of supervision.

